



*William F. Meggers*  
*(Informal photos by Jack Tech)*

## Foreword

When Dr. William F. Meggers came to NBS in 1914, the Bohr theory was only a year old. When he died in 1966, extensive analyses were available for the spectra of most neutral and singly ionized atoms; only one or two stable atoms remained for which some spectral regularities were not known. More than any other man, Dr. Meggers came to be identified with this voluminous increase in our knowledge of atomic structure.

During the early years of atomic spectroscopy, the analysis of spectra engaged the efforts of many of the world's physicists. When, during the early 1930's, the glamour in this field passed on to nuclear physics, most physicists followed. Though much was known about atomic structure, the available information was frequently fragmentary and unreliable, and virtually nothing was known about the complex rare earths.

Working with his colleague, Dr. Carl C. Kiess, and a handful of others, Dr. Meggers turned to ever more complex atoms and gave us, through his 178 published papers, one of the most extensive, significant, and reliable collections of data available to science.

In this issue we pay tribute to Dr. Meggers' distinguished career. These papers on spectroscopy were contributed by some of his students who are now working in the Spectroscopy Section at NBS—the section he directed during most of his professional career. Though officially retired since 1958, Dr. Meggers continued to make significant contributions to spectroscopy. At the time of his death, he was working on the analyses of four rare earth spectra. One of these is published in this issue. The importance of this paper is well brought out by its editor, Charlotte E. Moore, who has generously spent much time preparing this analysis for publication.

On December 16, 1966, a number of Dr. Meggers' colleagues and friends gathered at NBS to commemorate his distinguished career in spectroscopy. A. V. Astin, Paul D. Foote, George R. Harrison, and Carl C. Kiess spoke in tribute to Dr. Meggers. A pamphlet containing their remarks is available upon request.

We at NBS are deeply grateful for having had the privilege of working with Dr. Meggers. He was a great person and an outstanding scientist. His work will continue to influence the progress of atomic spectroscopy for years to come.

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